

THE UNITED STATES OF AMIERICA

TO ALL TO WHOM THESE: PRESENTS: SHALL COME;

Rutgers, The State University of Aeb Jersey

MILLERS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPUBLISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE CONTINUE OF THE VARIETY OF OFFERING IT FOR SALE, OR REPRODUCING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE CHESTED OF USING IT IN PROPUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT OF THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BLUEGRASS, KENTUCKY

'Diva'

In Testimone Marces. I have hereunto set my hand and caused the seal of the Mark Marketa Acute of the City of Washington, D.C. this twentieth day of August, in the year two thousand and eight.

Attost:

HmZ Commissioner

Commissioner Plant Variety Protection Office Agricultural Marketing Servico Lahak Tahamas

of Agricultur

REPRODUCE LOCALLY. Include form number and date on all reproduc	tions.	FORM APPROVED - OME	NO. 0581-0055 EXPIRES 12-31-9
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE		The following statements are made	in accordance with the Privacy Act of
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION C	OFFICE	19/4 (5 U.S.C. 552a) and the Pape	rwork Reduction Act (PRA) of 1995.
		Application is required in order to	determine if a plant variety protection
APPLICATION FOR PLANT VARIETY PROTECTION CER	RTIFICATE		2421). Information is held confidentia
(Instructions and information collection burden statement o	n ranareal		-
1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)	n reverse) .	until certificate is issued (7 U.S.C. 2) 2. TEMPORARY DESIGNATION	
Charges Carrolled State Callege		OR EXPERIMENTAL NUMBER	3. VARIETY NAME
c/o Dr. William Moyer			Diva
Rutgers, The State University of New Jersey ((BT: 8/8/2006)	A96-453	J. 144
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)		5. TELEPHONE (include area code)	***
Foran Hall		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	FOR OFFICIAL USE ONLY
Plant Biology & Pathology Dept.		(732) 932 - 9711 ext.160	
59 Dudley Road			PVPO NUMBER
New Brunswick, NJ			F DATE L August 20, 20
08901		6. FAX (include area code)	F DATE
		(732) 932 - 9441	I
,		(732) 932 - 9441	I august 20,20
		\$	N
7. GENUS AND SPECIES NAME	9 FASTISS		G
The same are an are reasons as a state of	8. FAMILY NAME (Botanical)	F FILING AND EXAMINATION FEI
Poa pratensis	Poaceae		E \$ 36.52
9. CROP KIND NAME (Common name)			E 363d S DATE
3. CROX KEND NAME (Common name)			
Kentucky bluegrass			R 8/20/2003
10 TENTO ADDITIONAL CONTRACTOR OF THE CONTRACTOR			C CERTIFICATION FEE:
 IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZA Government Institution 	TION (corporation, partn	ership, association, etc.) (Common Name)	E .
			I \$ 768.00
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		12. DATE OF INCORPORATION	E DATE PARA
	•		E DATE 8/12/2008
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SER Dr. William Meyer c/o Rutgers University - Cook College Foran Hall Plant Biology & Pathology Dept 59 Dudley Road New Brunswick, NI 08901		ON THE RECEIVE ALL PAPERS	14. TELEPHONE (include area code) (732) 932 - 9711 ext. 160 15. FAX (include area code) (732) 932 - 9411
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Followin	nstructions on reverse)		
a. Exhibit A. Origin and Breeding History of the Variety			
b. Exhibit B. Statement of Distinctness			•
c. Exhibit C. Objective Description of the Variety			
d. Exhibit D. Additional Description of the Variety (Optional)			
e. Exhibit E. Statement of the Basis of the Applicant's Ownership			
f. Voucher Sample (2500 viable untreated seeds or, for tuber propagated varies	ties verification that tissue	culture will be deposited and maintained in	an approved public repository)
g. Filing and Examination Fee (\$2,450), made payable to "Treasure of the United	States" (Mail to PVPO)		
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY	VARIETY NAME ONLY	AS A CLASS OF CERTIFIED SEEDS	Section 92(a) of the Plant Ville P
YES (If "yes," answer items 18 and 19 below)			Act)
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED A	AS TO AUT TO THE	o," go to item 20)	
GENERATIONS?	AS TO NUMBER OF	19. IF "YES" TO ITEM 18, WHICH CLASSES	OF PRODUCTION BEYOND BREEDERS SEED
$lacktriangleq_{ m Yes}$ $lacktriangleq_{ m No}$.
20. HAS THE VARIETY OR HYBRID PRODUCED FROM THE VARIETY BEEN RELE	ACED TIMES COMM	FOUNDATION REGIS	TERED CERTIFIED
Type for a second recovery the variet i been rele		POK SALE, OR MARKETED IN THE U.S	S. OR OTHER COUNTRIES?
YES (If "yes, "give names of countries and dates) 21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished applicable of or a tuber propagated variety a fiscus culture will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be furnished as a sample of the variety will be furnished as a sample of the variety will be furnished as a sample of the variety will be furnished as a sample of the variety will be furnished as a sample of the variety will be furnished as a sample of the variety will be furnished as a sample of the variety will be furnished as a sample of the variety will be furnished as a sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will be declared in the sample of the variety will b	NO		
Francis a last propagator vertely a tissue culture with the deposited in a public re	pository and maintained for	the duration of the certificate.	
The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced or tuber prop Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Vari	A been vitalises that a latence	elieve(s) that the variety is new, distinct, unifo	orm, and stable as required in
Applicant(s) is (are) informed that false representation herein can jeopardize protection and			
SIGNATURE OF APPLICANT (Owner(s))	SIGNATURE OF	APPLICANT (Owner(s))	
NAME (Please print of type)	NAME (OL-		
1 Keith 2 Coopel	NAME (Please p	rmi or typej	
CAPACITY OR TITLE Dean of Research + brachate DATE 07/27/	CAPACITY OR T	TILE	DATE
STD-470 (03-96) (Previous additions are to be destroyed)		See reverse for instructions and inform	nation collection by June 1

Exhibit A:

Origin and Breeding History Diva: (A96-453 Kentucky Bluegrass

Origin and breeding history of A96-453 Kentucky bluegrass (*Poa pratensis* L.) appears to have originated as a single, apomictic plant selected from the progeny of a cross between C-74 and a plant similar to Shamrock Kentucky bluegrass (1). C-74 is a vigorous, apomictic plant that originated from a plant collected from an old turf area in Exeter, Rhode Island in 1987.

A plant of C-74 was pollinated by Shamrock Kentucky bluegrass during the late winter of 1993-1994 in a greenhouse located on the Cook College campus of Rutgers University. Environmental conditions prior to and during pollination were modified to increase sexual reproduction of facultatively apomictic Kentucky bluegrasses (3,4,5). Seed for the C-74 female parent was harvested in the spring of 1994. Seedlings were grown in the greenhouse in the winter of 1994-1995 and hybrids were phenotypically identified. Selected hybrid plants were established in a spaced-plant nursery at the Rutgers University Plant Science Research and Extension Farm at Adelphia, New Jersey during the spring of 1995. The following summer, an attractive F1 hybrid plant was harvested on July 5, and yielded 9 grams. This was a late maturing, below average yielding plant compared to other Kentucky bluegrasses harvested from that nursery. In the fall of 1996, it was planted in a turf plot at Adelphia, New Jersey with the designation A96-453. A96-453 was 88% apomictic when observed from tillers grown from the original turf plot. A96-453 has very good floret fertility and a seed head rating of 7 based on a 1-9 scale (9=most seed heads). A96-453 has above average turf quality, above average spring green-up, and excellent leaf spot and stripe smut resistance.

In 1998 a seed increase block containing 1,542 plants was established. In the spring of 1999, 87 plants were removed (6%). The remaining plants were harvested in bulk and designated A96-453, breeder seed.

References:

- 1. Bailey, R.H., A. Wick, R.F. Bara, W.K. Dickson, and C.R. Funk. 1995. Registration of Shamrock Kentucky bluegrass. Crop Sci. 35:939-940.
- 2. Rose-Fricker, C.A., M.L. Fraser, W.A. Meyer, and C.R. Skogley. 1999. Registration of 'Unique' Kentucky bluegrass. Crop Sci. 39:290.
- 3. Bashaw, E.C., and C.R. Funk. 1987. Apomictic grasses. P. 40-82 *In F.* Lemaire (ed.) Proc. Int. Turfgrass Res. Conf., 5th Avignon, France. INRA Publ., Versailles.
- Hintzen, J.J., and A.J.P. van Wijk. 1985. Ecotype breeding and hybridization in Kentucky bluegrass (*Poa pratensis* L.). P. 213-219. *In* F. Lemaire (ed.) Proc. Int. Turfgrass Res. Conf., 5th Avignon, France. INRA Publ., Versailles.
- Pepin, G.W., and C.R. Funk. 1971. Intraspecific hybridization as a method of breeding Kentucky bluegrass for turf. Crop Sci. 11:445 - 448.

II. Breeder Seed Maintenance:

A breeder seed stock field was planted in isolation in 1998. Breeder seed was harvested in bulk (6 % rogued), in 1999 and is maintained in cold storage. Seed propagation is limited to three generations, one each of foundation, registered, and certified.

III. Stability and Uniformity:

A96-453 is a stable, uniform cultivar. Stability and uniformity has been observed in breeder and foundation seed multiplications and turf plots. Neither off-type or variant plants have been observed in the multiplication process.

Exhibit B:

Novelty Statement for A96-453 Kentucky Bluegrass (@7:6/20/2008)

The following summary outlines the distinctive characteristics of A96-453. The novelty of A96-453 is based on the unique combination of these characteristics. A96-453 is most similar to Baron, but may be differentiated by using the following criteria;

- 1) A96-453 has a darker genetic color compared to Baron (tables 1A, 1B, 5A, 5B).
- 2) A96-453 produces a smaller spread of rhizomes in one year compared to Baron (tables 1A, 1B).
- 3) The sheath length of the flag leaf is longer for A96-453 than Baron (tables 1A, 1B).
- 4) The leaf blade characteristics; sheath length and blade length are longer for A96-453 than Baron (tables 1A, 1B).
- 5) The lemma width and length are smaller for A96-453 than Baron (tables 2A, 2B).
- The length of the branches (long, medium, short) of the lower most whorl are longer for A96-453 compared to Baron (tables 2A, 2B).
- 7) The distance between the lower most whorls is greater for A96-453 than Baron (tables 2A, 2B).
- 8) A96-453 has a greater number of spikelets on the longest branch of the lower most whorl and a greater number of spikelets per panicle compared to Baron (tables 2A, 2B).
- 9) A96-453 exhibits a more erect growth habit compared to Baron (tables 3A, 3B).
- 10) The seed weight for A96-453 is greater than Baron (tables 3A, 3B).
- 11) The intermediated nerves on the lemma are less distinct for A96-453 compared to Baron (tables 4A, 4B).
- 12) A96-453 expresses a greater number of plants with four or less branches on the lower whorl compared to Baron (table 7).

Form Approved - OMB No. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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US. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PROGRAM PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

EXHIBIT C (BLUEGRASS)

OBJECTIVE DESCRIPTION OF VARIETY BLUEGRASS

(Poa spp.)

NAM	E OF APPLICAN	Γ(S)		TEMPORARY DESI	GNATION V	ARIETY NAME
		te University of New Jersey		A96-453		Diva
ADD	RESS (Street and N	No., or R.F.D. No., City, State	and ZIP Code)		ļ !F(OR OFFICIAL USE ONLY
ADD.	Foran Hall	10., or R.1 .D. 110., City, State	and Zir Code)			VPO NUMBER
		દ Pathology Dept.			r	
	59 Dudley Road				<u>u</u>	20030031
	New Brunswick				` #	20050031
neces record are ty used t	sary in order to fill ded to help establish pical for the variety to determine plant of	characterizes the variety in the all blanks (e.g. 089). Those of the novelty or uniqueness. Characteristics designate the system under the sys	characteristics man racteristics describ or SPACED PLAN sed:	ked with a star * are pi ed, including numberi ITS. Royal Horticultur De	referred to be rec cal measurement al Society or any scribe location o	orded. Any others should be s, should represent those that recognized color fan may be
1.		a compressa $2 = P$. prosome Number	atensis	3 = P. trivialis	4 = Others ((Please Specify):
2.	ADAPTATION	: (0 = Not Tested, 1 = Not Ad	dapted, 2 = Adapte	ed, 3 = Well Adapted)	· ·····	
	3 Northeast	t <u>[0]</u> Transitiona	l Zone <u>[0]</u> So	utheast [3 North Central	
	3 Pacific N.	W. <u>[0]</u> Intermounta	ain <u>[0]</u> So	outhwest (CA, AZ)	Other (Please S	Specify):
3.	MATURITY (A	at first anthesis): Give test are	a: Albany, Oreg	<u>yon</u>		
	<u> 5 </u>	1 = Very Early 4 = Medium late (Newport, 6 = Very Late (Pacific)	2 = Early (Delta, I , Adelphi, Aquila)		Medium Early (F Late (Merion, Ba	
-	52.33 days a	fter April 1, Date of First A	nthesis			
		Number of days earlier than	n ☆∐	1 = Nugget	2 = Fylking	3 = Delta
		Maturity same as	쇼 <u>[6</u>]	4 = Merion	5 = Newpor	t = 6 = Baron
٠		Number of days later than	☆∐	7 = Mystic	8 = Sabre	9 = Reubens

4.	PLAI	NT HEIGHT	Γ (At ma	turity	Average of	longe	st shoot of	10 plan	ts from s	oil surface	to top of	panicle)	: Test Arèa Alban	y, OF
	- <u>☆[2</u>	1	1 = Sho $3 = Med$		l (Merion,	Adelpl	hi)	2 = M6 $4 = Ta$	eđium sh ll (Delta)	ort (Baror	n, Fylking, 5 = Very)	
	☆ <u>[69.93</u>	cm Heig	tht											
		7	cm Sho	rter than		☆∐			1 = Nu	gget	2 = Fylki	ng	3 = Delta	
			Height s	same as		☆ <u>[6]</u>			4 = Me	rion	5 = New	ort	6 = Baron	
	LI	1	cm Talle	er than		☆∐			7 = My	stic	8 = Sabre	;	9 = Reubens	
5.	GROV	VTH HABI	Т:											<u>.</u>
	☆[3]	Habit:	1 = Pros	trate (N	igget)	2 = Se ₁	miprostrate	(Merio	on)	3 = Erec	ct (Delta)			
	19.90	cm Amo	unt of sp	read by	rhizomes i	n 1 yea	ır (give tesi	t area _	Albany	, Oregon)	
6.	LEAF	BLADE:									· · · · · · · · · · · · · · · · · · ·			
	☆[3]	Green col			nt green (N lerately dk		(Merion,	Adelphi)'	2 = Med 4 = Very	ium green dk. green	(Fylkin (Nugge	ng, Bonnieblue) et, Glade, Enmund	i)
	☆ <u>[2]</u>	Bluegreer	olor:	1 = Not 3 = Blue	bluegreen green (Nu	(Mysti gget, E	c, Touchdo Enmundi, A	own, Par Adelphi)	rade)	2 = Mod 4 = Ston	erately blu gly bluegre	egreen een (Ma	(Merion, A-34) njestic)	
	121	Winter co		1 = Ligh 4 = Dark			2 = Dark 5 = Not p	green urple		3 = Ligh 6 = Not g	t purple green or pu	ırple		
	☆[1]	Hairs upp	er side:		1 = Absen	ıt (Nug	get)		2 = Spar	se (Merio	on) 3	= Dens	e (Park)	
	11	Hairs lowe	er side:		1 = Absen	t (Fylk	ing, Merio	n	2 = Spar	se	3	= Dens	e (Nugget)	
	<u>[2]</u>	Luster upp	er side:		I = Shiny	(Eclips	se, Enmun	di)	2 = Dull	(Aquila, i	Parade)			
	11	Luster low	er side:		l = Shiny	(Mysti	c, Enmund	i)	2 = Duli	(Barbie, 1	Eclipse)			
•	☆[1]	Margin ha (Fringe on		or Base	l = Absent):	t (Delta	1)		2 = Prese	ent (Fylkir	ng, Merior	1)		
	☆ <u> 4 </u>	Width: 1			stic) 2 ni, Baron)	= Fine	(Nugget)	:	3 = Medi 5 = Very	um (Meri broad (M	ion, Fylkin Ionopoly)	g)		
	5.33	mm Width	(flag lea	uf)										
		m	m Narro	wer than	n ☆	Ш		ĵ	l = Nugg	et 2	= Fylking	g 3	= Delta	
÷		W	idth sam	ie as	. ❖	6		4	l = Merio	on 5	= Newpoi	rt 6	= Baron	
		mı	m Wider	than	\$	Ш		7	7 = Mysti	c 8	= Sabre	9	= Reubens	
	20.97	mm Length	(flag lea	af)										
		mr	n Shorte	r than	厽			1	= Nugge	et 2	= Fylking	3	= Delta	
		Lei	ngth sam	ne as	\$[<u>6 </u>		4	= Merio	n 5	= Newpor	t 6	= Baron	
	Ш	mn	n Longer	r than	\$1			7	= Mystic	8	= Sabre	9	= Reubens	
	<u> 1</u> I	Position of f	lag leaf	(angle to	stem);	1	= Appress	sed	2 = O	pen angle	, yet stiff		3 = Nodding	

9 LEMMA ☆|2 [Keel 1 = Glabrous 2 = Slightly pubescent 3 = Pubescent☆[]_ Marginal Nerves 1 = Distinct2 = Obscure1 Intermediate Nerves 1 = Distinct2 = Obscure|2 | Basal Webbing: 1 = Absent2 = Scant (Baron) 3 = Copious (Merion)

10. SEED: (Floret-not dehulled)

2 Apomixis Percentage: 1 = more than 95

2 = 85 to 95

3 = less than 85

								Dem Ch Ph	JVVV
1	<u>l.</u>	Phenol Reaction:		ne-lemma ack (Mystic	removed (Meri c - 2hrs)	on)		eige (Cougar) Black (-24	3 = Brown (Windsor) hrs)
	0.67	mm Width (avera	age of 10)	3.46	mm Length				
L	4,950	Milligrams per 1	0,000 seed						
		Milligra	ms less than	☆∐		1 = N	lugget	2 = Fylking	3 = Delta
		Weight	same as	☆∐		4 = N	ferion	5 = Newport	6 = Baron
	1,300	<u> </u> Milligra	ms more than	<u>☆[6 </u>		7 = N	lystic	8 = Sabre	9 = Reubens
.*	<u>[3 </u>	Weight Class (g p	er 10,000 seed):	2 = Medi	t (<3g Sydsport um (3g - 4g Ad y (>4g Fylking	delphi, P	arade)		
11.	ENVI	RONMENTAL RES	ISTANCE:	<i>f</i> . 1 . 1	G				
		Not tested; 1 = Very S				= Mode			y Resistant)
		Cool Temperature (Winter color)	O Cold (inju		<u>0</u> Heat			Drought	
		Shade	0 Low Ferti	•	<u>0</u> Acid Se (<ph 5.<="" td=""><td>.5)</td><td></td><td>Alkalinity (PH > 7.5)</td><td></td></ph>	.5)		Alkalinity (PH > 7.5)	
		Salinity	O Soil Comp	oaction	O Poor D	rainage	<u>10 1</u> .	Air Pollution	
		Other (Please Specify	7):		·				
12.		ASE RESISTANCE: ot Tested; 1 = Very S	Susceptible, 2 = 1	Moderately	Susceptible, 3	= Mode	rately Re	sistant 4 = Highl	y Pecietant)
·	<u>[0]</u>	Melting-Out Dreck				[0]		ina S. borealis	y 100sistaire)
	0	Helminthosporium	Leaf Spot Bipol	aris soroki	niana	<u> </u>		tust <i>Puccinia gra</i>	minis
	<u> 0 </u>	Brown Patch Rhize	octonia solani			0		Rust P. striiformi	
	<u> 0 </u>	Powdery Mildew E	Erysiphe graminis	8		<u> 0 </u>	_	ust P. poae-nemo	
	0	Strip Smut Ustilage	o striiformis			10		Stripe Rust P. pe	
	<u> 0 </u>	Flag Smut Urocysta	is agropyri			<u>[0]</u>	Pythiur	n Blight <i>Pythium</i>	spp.
	101	Pink Snow Mold Fi	usarium nivale			[0]	Red Th	read corticium fu	ijcifo rm e
	101	Ergot Claviceps pu	rpurea			<u>10 </u>	Other (Please Specify): _	
	<u> 0 </u>	Fusarium Blight Fu	ısarium roseum,	F. tricinct	um	<u> 0 </u>	Other (Please Specify): _	
	0	Typhula Blight Typ	hula spp.						
	101	Dollar Spot Scleroti	inia homoeocarp	pa					·
13.	INSECT (0 = No	rs, NEMATODES, I t Tested; 1 = Very Su	RESISTANCE: usceptible, 2 = M	oderately (Susceptible, 3 =	= Modera	ntely Resi	stant, 4 = Highly	Resistant)
	01	Chinch Bug Blissus							
	101	Sod Webworm Cran							

200300315

PRODUCED, NEWATODES RESISTANCE (Continue	ODES, RESISTANCE (Continued	NEMATODES	INSECTS.
--	-----------------------------	-----------	----------

<u>10 1</u>	Bluegrass Billbug Sphenophorus parvulus
<u> 0 </u>	White Grub: Japanese Beetle, Chafers (give species:)
<u>[0]</u>	Greenbug Aphid Schizaphis graminum
<u> 0 </u>	Other (Please Specify):
[0]	Other (Please Specify):

14. Give variety or varieties that most closely resemble the application variety. For the following characteristics indicate Degree of Resemblance by placing in the column marked D.R., one of the following numbers: 1 = Application variety is less than comparison variety; 2 = Same as; 3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Maturity-heading	Baron	2	Leaf Width	Baron	2
Height	Baron	2	Leaf Color Spring	Baron	3
Seed Size	Baron	3	Leaf Color Summer	Baron	3
Seed Weight	Baron	. 3	Leaf Color Winter	Baron	3
Cold Injury			Drought		
Heat			Disease**		
Shade					

^{**}Specify each disease evaluated

15. ADDITIONAL DESCRIPTION

Describe all characteristics and conditions that cannot be adequately described in this form in Exhibit D.

A morphological nursery designated 99PVPPP1 was established in September of 1999, in Albany, Oregon. Experimental design consisted of 22 entries; 3 replications per entry; 20 plants per replication; for a total of 60 plants per entry. Baron, America, and Unique were used as standards. Plants were established on 2.5 foot centers with a skip row between replications and between entries.

The nursery received 30 pounds of nitrogen per acre rate following establishment and 50 pounds of nitrogen per acre per year in 2000 and 2001. The fertilizer source was 15-15-15 and was applied as a split application with ½ applied in the spring and ½ in the fall. The nursery was sprayed twice each spring, 3 weeks between applications, with Tilt (2 oz/acre rate), to prevent stem rust. One pound of Karmex per acre rate was applied during late summer to prevent emergence of volunteer seedlings.

Data was analyzed using analysis of variance for a randomized complete block design. Means were calculated for each replication and then analyzed.

Exhibit D:

Additional Description

A96-453 Kentucky Bluegrass

53 is an improved turf-type Kentucky bluegrass. A96-453 is a earlier maturing cultivar compared to Unique or America (tables 1A, 1B). The genetic color is darker than previously released cultivars such as Baron (tables 1A, 1B). A96-453 is a dense bunch type, producing fewer rhizomes in one year compared to Baron (tables 1A, 1B). The height of the flag leaf for A96-453 is longer than America and Unique (tables 1A, 1B). The sheath length of the flag leaf for A96-453 is longer than Unique, America and Baron (tables 1A, 1B). A96-453 expresses a longer internode length of the flag leaf compared to America (tables 1A, 1B). The sheath length of the leaf blade for A96-453 is longer compared to Unique, America, and Baron (tables 1A, 1B). The lemma length and width of A96-453 are greater compared to Unique but, smaller than Baron (tables 2A, 2B). A96-453 has a greater spikelet length compared to Unique and America (tables 2A, 2B). The length of the shortest branch of the lower most whorl is longer compared to Unique, America, and Baron (tables 2A, 2B). A96-453 expresses a more erect growth habit compared to Unique, America, and Baron (tables 3A, 3B). The seed weight of A96-453 is greater than Unique, America, and Baron (tables 3A, 3B). A96-453 exhibits fewer plants with the panicle collar closed compared to America and Unique (tables 3A, 3B). A96-453 has a higher frequency of plants with four branches on the lower most whorl compared to Unique, America, and Baron (table 7).

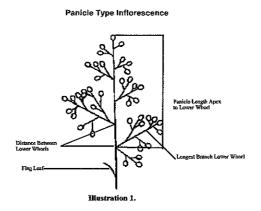


Table 1A

2000 Morphological Data

_																
······	Cultivar	Heading Date (days after April 1)	Anthesis Date (days after April 1)	Genetic Color	Mature Plant Height (cm)	Plant Width (cm)	Panicle Length (cm)	Flag Leaf Length (cm)	Flag Leaf Width (cm)	Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)	Flag Leaf Internode Length (cm)	Leaf Blade Length	Leaf Blade Width	Leaf Blade Height	Leaf Sheath Length
100/0	<a96-453></a96-453>	25.00	52.33	5.00	69.93	19.90	48.63	20.97	5.33	36.27	14.87	19.13	23.53	(200)	(clu)	(GII)
<u>, </u>	A97-1336	22.00	49.33	8.00	70.17	24.90	48.60	19.37	5.00	35.23	13.70	19.27	20.43	\$ 33	13.50	12.03
	A97-1400	31.00	55.67	5.00	65.40	22.73	46.60	24.37	5.67	34.20	15.07	15.27	06.96	6.67	15.02	11.00
	A97-1432	32.33	54.33	6.67	59.17	20.97	41.73	19.10	5.00	30.23	13.43	16.57	22.47	5.33	19.63	11.90
	A96-402	33.67	57.00	7.00	64.50	23.97	53.23	23.73	6.00	27.30	15.77	10.70	7 F.32	SE.U	12.03	11.43
	A96-328	19.67	52.33	8.00	71.20	18.40	77 04	21.50	5 33			24:47	14.64	00.0	10.77	11.93
Т								41.30	2,33	45.30	14.67	21.50	25.47	00'9	21.57	12.23
	Unique	32,33	58.67	6.00	61.57	19.40	40.37	20.03	4.67	32.57	12.33	17.71	22.60	5.33	13.47	10 97
	America	31.33	57.67	5.67	62.30	19.80	42.73	20.47	5.00	32.47	13.00	16.63	22.53	905	13.63	10.87
	Baron	15.33	46.67	4.00	57.63	24.77	40.47	19.90	5.33	31.23	13.93	1463	19.87	223	12.40	10.07
	LSD 5%	1.36	1.56	0.42	4.23	2.13	3.12	1.56	0.56	3.11	0.74	1.90		0.33	7.50	0.70
	c.v.	4.18	2.19	5.16	4.78	7.25	5.12	5.36	7.79	6.69	3.80	8 47	20.5	A 00	0.00	6/:0
2	feasurements ta	Measurements taken in Alhany Orangor 3 rang 20 mlouts/am = 60 d.t.	Oregon: 2 rong	An 12	, ,]					20.0	71.0	2,75	0.20	10.70	5.L3

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

Cultivar under evaluation

significant difference over two years one location.

significant difference over one year one location.

Table 1B

2001 Morphological Data

Cultivar	Heading Date (days after April 1)	Anthesis Date (days after April 1)	Genetic Color	Mature Plant Height (cm)	Plant Width (cm)	Panicle Length (cm)	Flag Leaf Length (cm)	Flag Leaf Width (cm)	Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)	Flag Leaf Internode Length (cm)	Leaf Blade Length	Leaf Blade Width	Leaf Blade Height	Leaf Sheath Length
250 453>	25.67	50.00	5.33	09.69	44.33	45.53	25.70	3.67	39.20	16.03	17.43	28.53	4.00	18.53	13.57
A97-1336	22.33	47.00	6.67	68.63	50.50	45.23	20.07	3.33	36.67	13.67	18.17	21.83	4.00	15.80	11.17
A97-1400	28.33	52.00	5.00	71.57	47.37	46.63	26.57	3.67	39.17	15.03	15.70	28.87	4.67	20.43	12.13
A97-1432	27.33	49.00	5.33	68.77	48.50	44.53	21.17	3.33	38.23	14.23	16.63	25.17	4.00	19.93	12.20
A96-402	31.67	54.33	7.67	70.50	49.70	48.53	25.40	3.67	37.10	15.40	17.43	28.57	4.67	16.10	12.63
A96-328	22.00	49.67	6.67	71.03	41.23	42.97	26.83	4.00	43.77	17.10	17.07	31.57	4.33	23.90	14.50
Unique	30.00	54.67	4.67	65.67	45.67	42.83	23.10	3.67	35.50	12.50	16.53	26.03	4.00	16.83	10.97
America	29.67	53.67	4.33	69:99	44.03	42.90	23.40	3.67	36.47	13.10	15.83	26.60	4.00	18.83	11.43
Baron	24.67	46.67	4.33	68.73	51.50	45.03	22.30	3.67	38.37	15.03	17.33	22.90	4.33	17.63	12.13
LSD 5%	1.06	0.94	0.55	2.77	4.05	2.78	1,23	0.62	2.36	0.86	1.12	1.50	0.49	2.14	0.75
C.V.	2,99	1.38	7.28	2.99	6.47	4.60	3.81	13.42	4.54	4.18	5.22	4.13	9.12	8.04	4.36
Measurements 1	taken in Albany	Measurements taken in Albany Organii 3 ransi 20 aloutolum - 60 do	30 mlonto/rem		to mainta										

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

Cultivar under evaluation

significant difference over two years one location.

significant difference over one year one location.

2000 Laboratory Morphological Data

Table 2A

Cultivar	Lenma Length (mm)	Lemma Width (mm)	Flores per Spikele	Spikelet Length (mm)	Length of Longest Whorl (mm)	Length of Medium Whorl (mm)	Length of Shortest Whorl (mm)	Distance Between Lower Most Whorls (mm)	Number of Spikelets on the Longest Whorl	Spikelets per Panicle	Length of Panicle From Lower Most Whorl	Basal Hair Length
\$30.453.\$ \$40.453.\$	3.46	0.67	5.00	5.25	65.13	51.73	42.49	25.90	17.67	169.00	113.83	4.00
A97-1336	3.52	89'0	5.00	5.23	61.27	47.61	38.03	22.57	15.33	165.33	113 66	7.30
A97-1400	3,48	0.67	5.00	5.26	72.62	54.98	40.57	30.99	17.00	190.00	128 83	4.34
A97-1432	3.38	29'0	5.33	5.56	58.94	42.38	31.53	25.39	13.00	127.00	108 62	50.5
A96-402	3.60	0.63	4.00	5.47	70.94	54.31	39.96	28.26	16.67	178 33	125.60	4.73
A96-328	3.28	19.0	4.33	5.14	62.60	46.78	36.15	25.52	19.67	188 33	116.30	60 6
Unique	2.91	0.56	5.00	4.84	65.28	48.94	37.63	25.63	14.67	147 33	107.43	3.33
America	3.09	0.59	5.33	5.00	65.91	49.95	39.06	26.24	14.33	153.33	113.25	3.51
Baron	3.72	0.76	5.00	5.61	58.74	43.23	31.87	23.18	12.33	131.67	100 87	3.58
LSD 5%	0.12	0.04	0.47	0.23	3.26	3.12	2.68	1.71	1.64	14.46	6.25	85.0
C.V.	2.51	4.03	7.49	3.20	3.67	4.78	5.51	4.50	96'9	6.34	3 88	1 120
Mosamonto talem in Att.	alera in Alban	,		, ,						2	200.0	11.13

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

Cultivar under evaluation

significant difference over two years one location.

significant difference over one year one location.

Table 2B

2001 Laboratory Morphological Data

Basal Hair Length (mm) 2.46 2.49 2.46 3.10 2.94 2.67 2.67 2.50 2.81 99.0 18.2 Length of Panicle from Lower Most Whorl to Tip (mm) 113.13 125.68 132.62 128.63 132.30 153.48 121.12 125.97 107.95 4,40 7.81 Spikelets per Panicle 230.67 198.67 210.67 186.00 225.67 316.67 206.00 213.33 165.67 28.26 66.6 Number of Spikelets on the Longest Whorl (mm) 16.00 18.00 15.67 19.00 29.00 19.00 19.00 12.67 1.86 7.45 Distance Between Lower Most Whorls (mm) 28.44 22.83 31.88 30.15 27.88 34.45 28.30 28.87 23.71 1.94 4.66 Length of Shortest Whorl (mm) 41.26 35.36 36.74 35.08 37.02 43.07 37.18 37.11 27.59 3.55 7.72 Length of Meduim Whorl (mm) 55.28 46.62 53.20 49.50 53.92 60.62 50.86 51.57 40.84 3.87 5.71 Length of Longest Whorl (mm) 70.43 59.22 70.02 67.54 70.79 68.46 55.96 79.61 68.65 4.92 5.30 Spikelet Length (mm) 4.66 4.76 4.46 4.88 4.73 4.48 4.17 4.78 0.37 5.91 4.2. Florets per Spikelet 13.15 4.00 4.00 4.67 4.67 4.33 4.00 4,33 4.67 4.67 0.76 Lemma Width (mm) 99.0 0.64 0.60 0.61 0.61 99.0 0.54 0.56 0.72 0.05 5.97 Lemma Length (mm) 3.28 3.24 3.26 3.11 3.38 3,14 2.68 3,06 2.74 0.143.61 (81:6/aq/ag)<436-453> A97-1336 A97-1400 A97-1432 A96-402 Cultivar A96-328 LSD 5% Unique America Baron C.V.

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

Cultivar under evaluation significant difference over two years one location.

significant difference over one year one location.

2000 Additional Morphological Measurements of the Panicle

Table 3A

Seed Weight mg per 10,000 Seeds Shape of Rachis % Straight Panicle Branch Lower Whorl % Ascending Panicle Branch Lower Whorl % Horizontal Panicle Branch Lower Whorl % Drooping Panicle Collar % Closed Panicle Type % Open Panicle Color % Red Panicle Orientatio n % U**pr**ight S ~ Anther Color % Purple Growth Habit % Erect (BIG/30/04) (KA96-4537) A96-328 A96-402 America Cultivar Unique Baron A97-1400 A97-1336 A97-1432

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points Cultivar under evaluation

2001 Additional Morphological Measurements of the Panicle

Table 3B

Cultivar	Growth Habit % Erect	Anther Color % Purple	Panicle Orientatio n % Upright	Panicle Color % Red	Panicle Type % Open	Panicle Collar % Closed	Panicle Branch Lower Whorl % Drooping	Panicle Branch Lower Whorl % Horizontal	Panicle Branch Lower Whorl % Ascending	Shape of Rachis % Straight	Seed Weight mg per 10,000 Seeds
96-453>) A96-453>)	\$6	53	2	2	100	73	0	100	0	100	4860
A97- 1336	100	09	0	0	ED.	70	3	26	0	100	2510
A97- 1400	100	62	2	2	100	57	æ	26	0	100	2170
A97- 1432	33	88	0	0	100	95	2	96	2	100	1890
A96-402	2	10	0	0	100	80	7	93	0	100	2940
A96-328	100	95	0	0	100	83	0	100	0	100	2430
Unique	33	30	0	0	100	06	3	26	0	100	2180
America	7	28	0	0	100	63	\$	95	0	100	2910
Baron	10	75	0	. 0	100	89	5	95	0	100	4210
and the state of the	A ni norton	easurements taken in Albany Orosa									

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

Cultivar under evaluation

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2000 Additional Morphological Measurements of the Leaf Blade

Sectling Leaf Shade Leaf Sheath Olor Leaf Sheath Asirs of Read Sheath S											
0 17 52 3 95 5 On Townson of Street of St	(See ("Traffice)	Cultivar	Seedling Leaf Sheath Color % Red		Leaf Sheath Collar Hairs % Pubescence	Leaf Sheath Ligule Hairs % Pubescence	Leaf Sheath Margin Hairs % Pubescence	Flag Leaf Position % Ascending	Flag Leaf Position	Flag Leaf Position	Intermediate Nerves on the Lemma
28 77 8 100 0 15 10 2 88 0 12 7 17 0 95 0 12 13 35 0 78 2 20 12 10 0 100 0 0 30 18 0 100 0 0 27 25 0 100 0 0 0 35 32 0 100 0 0 0 0	(SAMO: C)	\$35 453 \$	0	0	17	52		of moduling	70 MOTIZOREAL	% Descending	% Distinct
28 77 8 100 0 0 15 10 2 88 0 12 7 17 0 95 0 5 13 35 0 78 2 20 12 10 0 100 0 0 30 18 0 100 0 0 27 25 0 100 0 0 0 35 32 0 17 0 0 0		707 1336	_				,	2	2	0	7
15 10 2 88 0 12 7 17 0 95 0 5 13 35 0 78 2 20 12 10 0 100 0 0 30 18 0 100 0 0 27 25 0 100 0 0 8 35 32 0 17 0 0 0		757/-1330	-	10	28	77	∞	100	0	0	1
7 17 0 95 0 12 13 35 0 78 2 20 12 10 0 100 0 0 0 30 18 0 100 0 0 0 2 27 25 0 100 0 0 0 83 17 0 0		A97-1400	0	3	15	10	2	88	, ,	, :	,
7 17 0 95 0 5 13 35 0 78 2 20 12 10 0 100 0 0 30 18 0 100 0 0 27 25 0 100 0 0 35 32 0 83 17 0	-	A97-1432	U	-				201		12	12
13 35 0 78 2 20 12 10 0 100 0 0 30 18 0 100 0 0 27 25 0 100 0 0 35 32 0 83 17 0			,	0	,	17	0	95	0	\$,
12 10 0 100 0 20 30 18 0 100 0 0 27 25 0 100 0 0 35 32 0 83 17 0		A96-402	0	0	13	35	6	ê			7
12 10 0 100 0 0 30 18 0 100 0 0 27 25 0 100 0 0 35 32 0 83 17 0		000 701						9/	2	20	0
30 18 0 100 0 27 25 0 100 0 35 32 0 83 17 0		A90-328	0	0	12	10	0	100	-		
27 25 0 100 0 0 35 32 0 100 0 0 35 32 0 83 17 0		Unique	0	0	30	0			,		7
27 25 0 100 0 0 35 32 0 83 17 0				,	30	18	0	100	0	0	40
35 32 0 83 17 0	. •	America	0	0	27	25	0	100			
34 0 83 17 0		Baron	0	0	35	32			,	5	8
		, footoning			30	34	<u>→</u>	83	17	0	23

weasurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

Cultivar under evaluation

Table 4B

Internediate Nerves on the Lemma % Distinct ۲ч Flag Leaf Position % Descending 2001 Additional Morphological Measurements of the Leaf Blade **!**~ O Flag Leaf Position % Horizontal Œ Flag Leaf Position % Ascending Leaf Sheath Margin Hairs % Pubescence ~ **r**~ Leaf Sheath Ligule Hairs % Pubescence Leaf Sheath Collar Hairs % Pubescence Leaf Blade Margin Hairs % Pubescence o Seedling Leaf Sheath Color % Red (87:6/20/08) DIVA A97-1336 A97-1432 A97-1400 A96-402 A96-328 Cultivar America Unique Baron

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

Cultivar under evaluation

Table 5A

2000 Additional Morphological Measurements of the Plant

Cultivar	Winter Color % Light Green	Leaf Blade Green Color % Light Green	Leaf Blade Green Color % Medium Green	Leaf Blade Green Color % Medium Dark Green	Leaf Blade Green Color % Dark Green	Leaf Blade Bluegreen Color % Not	Leaf Blade Bluegreen Color % Moderately	Leaf Blade Bluegreen Color % Bluegreen	Leaf Blade Luster Lower Side % Without	Leaf Blade Luster Upper Side % Without	Percent Apomictic
496.453>	10	∞	92	0	0	The Barrier	Danghagi			Luster	
A97-1336	3	0	-			, ,	5	>	7	100	96
				į	5	n	3	26	0	100	95
A97-1400	3	7	95	3	0	'n	95	c	٥		
407-1/120	•	,	;					,	o	100	91
76+1	7	3	13	0	83	0	0	100	1	901	
496.402										100	28
	,	7	ç	0	93		7	26	12	100	5
A96-328	0	0	0	0	100	0				700	25
						,		700	2	100	100
omdne	o	0	0	100	0	7	93	0		001	
America	7	0	18	82		1,		,	,	100	100
T				,	,	0	76	0	0	100	87
Baron	3	2	86	0	0	50	\$0				
ments to	aken in Alha	Measurements taken in Albany Orange 3 An 1							07	001	96

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points Cultivar under evaluation

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2001 Additional Morphological Measurements of the Plant

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Cultival	winter Color % Light Green	Leaf Blade Green Color % Light Green	Leaf Blade Green Color % Medium Green	Leaf Blade Green Color % Medium Dark Green	Leaf Blade Green Color % Dark Green	Leaf Blade Bluegreen Color % Not	Leaf Blade Bluegreen Color % Moderately	Leaf Blade Bluegreen Color % Bluegreen	Leaf Blade Luster Lower Side % Without	Leaf Blade Luster Upper Side % Without	Percent Apomictic
8 <466.483>	22	10	96	C		,	Dinegreen		Luster	Luster	
766. 204	L.				>	2	97	0	0	100	85
A97-1336	5	0	2	64	96	0	0	100			
A97-1400	8	0	95	,				100	0	100	93
				,	0	0	100	0	0	. 90	60
A97-1432	5	3	0	12	85	0		50.		2	7,5
496.402						,	,	nor	0	100	88
701-000	,	O.	3	7	93	7	0	86		0.00	
A96-328	0	0	0	0	100	-		? ?		100	90
Unique	0	-				,		100	0	100	26
	,	5	0	100	0	0	100	. 0	0	100	g
America	3	0	13	87	0	0	100		, ,	700	7,
Baron	0	,	80		1				0	100	91
Moogram			\$2	0	_ 0	100	0	0		-	
Measurements 1	aken in Alba	uty, Oregon: 3 res	wicasurements taken in Albany, Oregon: 3 reps. 20 plants/rep.	= 60 data mainta				·	_	001	96

Measurements taken in Albany, Oregon; 3 reps; 20 pl

Cultivar under evaluation

ST:GRO(108)

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Table (

2000 Additional Observations

		-,		_	_							
	Lemma Hairs Intermediate Nerve % Present	901	100	100	100		100	100	100	001	nar	100
	Lemma Hairs Midrib Nerve % Present	100	AAT .	100	100		100	100	100	100	201	100
	Lemma Hairs Margin Nerve % Present	100		100	100	005	100	100	100	100	201	100
	Lemma Hairs on Keel % Present	100	000	100	100	100	201	100	100	100	100	100
	Lemma Hairs Basal End % Present	100	100	700	100	100	2	100	100	100	100	100
	Leaf Sheath Keel % Present	100	100	201	100	100		100	100	100	100	100
	Leaf Sheath Surface Hairs % Present	0	C		0	0		0	0	0	0	0
	Leaf Blade Hairs Lower Side % Present	0	0		0	0		0	0	0	0	0
	Leaf Blade Hairs Upper Side % Present	0	0		0	0		0	0	0	0	0
	Leaf Sheath Surface Roughness % Rough	0	0		0	0		0	0	0	0	0
	Leaf Sheath Margin Roughness % Rough	0	0		0	0		0	0	0	0	0
	Sheath Sheath Glaucosity % Present	0	0		0	0		0	0	0	0	0
1	Cultivar	₹886453>	A97-1336		A97-1400	A97-1432		A96-402	A96-328	Unique	America	Baron

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

2001 Additional Observations

Table 6B

į												
Cultivar	Leaf Sheath Glaucosity % Present	Leaf Sheath Margin Roughness % Rough	Leaf Sheath Surface Roughness % Rough	Leaf Blade Hairs Upper Side % Present	Leaf Blade Hairs Lower Side % Present	Leaf Sheath Surface Hairs % Present	Leaf Sheath Keel % Present	Lenma Hairs Basal End % Present	Lemma Hairs on Keel % Present	Lemma Hairs Margin Nerve % Present	Lemma Hairs Midrib Nerve % Present	Lemma Hairs Intermediate Nerve % Present
\$ \$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0	0	0	0	0	0	100	100	100	100	100	100
A97-1336	0	0	0	0	0	0	100	100	100	100	100	100
A97-1400	0	0	0	0	0	0	100	100	100	100	100	100
A97-1432	0	0	0	0	0	0	100	100	100	100	001	100
A96-402	0	0	0	0	0	0	100	100	100	001	100	100
A96-328	0	0	0	0	0	0	100	100	100	100	100	100
Unique	0	0	0	0	0	0	100	100	100	100	100	100
America	0	0	0	0	0	0	100	100	100	81	100	100
Baron	0	0	0	0	0	0	100	100	100	100	100	100
Maganromante	Maganiromanta talom in Allens	,						_	-	-	3	3

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

• Cultivar under evaluation

Measurements taken in Albany, Oregon; 3 reps; 20 plants/rep = 60 data points

Cultivar under evaluation

REPRODUCE LOCALLY. Include form number and date on all reproductions.	FORM APPROVED - OMB	NO. 0581-0055 EXPIRES 12-31-
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE	The following statements are made i 1974 (5 U.S.C. 552a) and the Paper	in accordance with the Privacy Act of work Reduction Act (PRA) of 1995.
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to a certificate is to be issued (7 U.S.C. 2 until certificate is issued (7 U.S.C. 2-	421). Information is held confidenti
1. NAME OF APPLICANT(S) The State University of New Jersey Cot D. William March (3T: 8/8/2006)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER A96-453	3. VARIETY NAME DÎVA
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	5. TELEPHONE (include area code)	6. FAX (include area code)
Foran Hall Plant Biology & Pathology Dept.	(732) 932 - 9711 ext. 160	(732) 932 - 9441
59 Dudley Road New Brunswick, NJ 08901	7. PVPO NUMBER 1 1 3 U	10315
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no,		YES NO
9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country		YES NO
10. Is the applicant the original breeder? If no, please answer the following:		
a. If original rights to variety were owned by individual (s): Is (are) the original breeder(s) a U.S. national(s)? If no give name of country		YES NO
b. If original rights to variety were owned by a company: Is the original breeder(s) U.S. based company? If no give name of country		Y YES NO
11. Additional explanation on ownership (If needed, use reverse for extra space):		
PLEASE NOTE:		
Plant variety protection can be afforded only to owners (not licensees)) who meet one of the following cri	toria:
1. If the rights to the variety are owned by the original breeder, that person must of a country which affords similar protection to nationals of the U.S. for the s	t be a U.S. national national of a UPOV r	
If the rights to the variety are owned by the company which employed the orig nationals of a UPOV member country, or owned by nationals of a country wh genus and species.	ginal breeder(s) the company must be U.S.	S. based, owned by of the U.S. for the same
3. If the applicant is an owner who is not the original breeder, both the original	breeder and the applicant must meet one	of the above criteria.
The original breeder may be the individual or company who directed final breeding definition.	g. See Section 41(a)(2) of the Plant Varie	ety Protection Act for
Public reporting burden for this collection of information is estimated to average 10 minutes per response, i naintaining the data needed, and completing and reviewing the collection of information. Send comments t suggestions for reducing this burden, to Department of Agriculture, clearance Officer, OIRM, AG Box 7630, 1581-0055 and form number in your letter.		
Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays	a valid OMB control number.	
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